

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 75.15**SOURCE INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001862**Date Inspected:** 24-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Shanghai Pujiang Cable Co. (SPCC)**Location:** Bao Steel, Shanghai**Quality Control Contact:** Mr. Pei**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** witnessed tensile tests for 5.4mm diameter galvanized wire**Bridge No:** 34-0006**Component:** 5.4mm diameter galvanized wire**Bid Item:** 66A**Lot No:** B240**Summary of Items Observed:**

Caltrans QA Inspector Mr. Wai Pau travel to Bao Steel witnessed tensile tests for 5.4mm diameter galvanized wire from coil # h31002-475-1/2 thru h31002-492-1/2. The coil heat number # 566957 and 566958. All the tensile tests have been recorded on electronic spreadsheet and accepted by Bao Steel technician. Caltrans QAI verified that accuracy of tensile strength test readings that were indicated on digital indicator at the time of rupture for each wire. Based on Caltrans QA observation, the tensile tests appeared to be in general compliance with requirement of Caltrans Special Provision and contract documents.

Caltrans QA Inspector observed two Bao Steel workers in process of automatic hot galvanizing for 5.4mm diameter wires. All of wires have been degreased by hydrochloric acid prior for galvanizing. The wires have been released from reels to solvent treatment system, which is covering the surface of cleaning steel wire with a layer of halogen salt. The compound is use salt chloride. After drying the wires, the solvent is reacted with zinc at inlet wire of zinc tank, ensuring cleaning surface of steel wire for sufficient metal diffusion inside zinc tank. The wires will transfer to galvanizing tank; during hot galvanizing the zinc-iron temperature showed on digital indicator is 450 C. The galvanized wires are cool by water after from the tank. Based on Caltrans QAI observations, no discrepancies were noted.

SOURCE INSPECTION REPORT

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The wire load on the roller after galvanized



The wires through halogen salt tank



The wires will transfer to galvanizing tank after cleaning



The wires through heat water tank

Summary of Conversations:

As notes within report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng 15921845703 , who represents the Office of Structural Materials for your project.

Inspected By: Pau,Wai

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer